

GAO

Report to the Chairman, Subcommittee  
on Investigations and Oversight,  
Committee on Science, Space, and  
Technology, House of Representatives

September 1993

# NASA PROPERTY

## Improving Management of Government Equipment Provided to Contractors



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United States  
General Accounting Office  
Washington, D.C. 20548

**National Security and  
International Affairs Division**

B-253482

September 9, 1993

The Honorable James A. Hayes  
Chairman, Subcommittee on Investigations and Oversight  
Committee on Science, Space, and Technology  
House of Representatives

Dear Mr. Chairman:

This report responds to the former Chairman's request that we review the National Aeronautics and Space Administration's (NASA) management of government equipment provided to contractors. We make recommendations to NASA that are intended to minimize the amount of equipment the agency provides to contractors and improve controls over and reporting of such equipment.

As you requested, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Administrator of NASA; the Secretary of Defense; appropriate congressional committees; and other interested parties, upon request.

If you or your staff have any questions, please contact me at (202) 512-8412. Major contributors to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in cursive script that reads 'Donna Heivilin'.

Donna M. Heivilin, Director  
Defense Management and NASA Issues

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# Executive Summary

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## Purpose

The National Aeronautics and Space Administration (NASA) has provided billions of dollars of government-owned personal property to its contractors for use on research and development, production, and service contracts. The value of government personal property, especially general purpose equipment, provided to contractors has grown substantially in recent years despite the government policy to minimize providing equipment to contractors.

The Chairman, Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, requested that GAO review NASA property management activities. Specifically, GAO's objectives were to determine (1) NASA's compliance with federal regulations intended to minimize the amount of government-owned, contractor-held general purpose equipment; (2) the effectiveness of government and contractor controls over equipment; and (3) the adequacy of NASA's reporting of this equipment.

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## Background

NASA categorizes personal property as general purpose equipment, special test equipment, special tooling, space property, and materials. For many years, federal procurement policy has been to limit the amount of government equipment provided to contractors. For example, general purpose equipment is to be provided to contractors on an exception basis only—such as when the contractor is unable to buy it, and the contract could not be performed without it.

According to NASA records, contractors held \$14.3 billion of agency-owned personal property in 1992. Of this amount, contractors held about \$3 billion in general purpose equipment, special test equipment, and special tooling; approximately \$9.4 billion in space hardware; and about \$1.9 billion in materials.

GAO focused on general purpose equipment, special test equipment, and special tooling because (1) NASA had experienced high dollar growth in these equipment categories and because (2) Federal Acquisition Regulations (FAR) provisions for providing and controlling this equipment are stringent. The value of NASA-owned general purpose equipment, special test equipment, and special tooling held by contractors increased from about \$1 billion in 1982 to about \$3 billion in 1992. With adjustments for inflation, the value of such equipment increased more than 80 percent over the decade. During this period, the value of general purpose equipment provided to contractors increased from \$488 million to \$1.9 billion. With

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inflation adjustments, the value of general purpose equipment more than doubled over this period. GAO's review focused on 13 contractors who held over \$810 million, or 27 percent, of NASA-owned general purpose equipment, special test equipment, and special tooling.

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## Results in Brief

One reason for the substantial growth in the value of general purpose equipment held by NASA contractors is that the agency has not complied with FAR provisions intended to ensure that the government provides such equipment only when contractors cannot provide it. GAO's review of 13 contractors showed that it had become standard practice for NASA contracting officers to provide contractors with general purpose equipment without either meeting any of the FAR exceptions that permit such actions or receiving approvals to deviate from the FAR. The implementation of policies designed to limit the amount of general purpose equipment provided to contractors has been impeded because some NASA procurement and program personnel are not adequately trained in property issues and NASA procurement oversight and policy guidance has been ineffective. While GAO's work focused on specific centers and contractors, the prevalence of some deficiencies and widespread weaknesses in policy and oversight could indicate systemic property management problems.

In addition, NASA has not effectively overseen equipment acquisitions and utilization for these 13 contractors. Government property administrators did not adequately determine during their periodic reviews of contractors' property systems that it was appropriate for the government to provide the equipment and that its purchase was properly authorized by NASA contracting officers. In areas other than acquisition and use, written procedures and controls were adequate, but contractor and government personnel did not consistently implement them.

Finally, NASA lacked assurance of the reliability of property reports for the 13 contractors GAO visited. Some of these reports on the value and type of NASA property being held by contractors contained errors totaling in the millions of dollars. For example, one contractor did not report more than \$2 million in government property that a subcontractor held. Some of the problems were similar to those GAO had previously reported.<sup>1</sup> Government property administrators often did not discover the errors in contractors' property reports because their surveys of contractors'

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<sup>1</sup>Financial Management: NASA's Financial Reports Are Based on Unreliable Data (GAO/AFMD-93-3, Oct. 29, 1992).

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property systems and their reviews of these reports lacked sufficient detail and scope to ensure accurate reporting.

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## Principal Findings

### NASA Has Not Minimized the Amount of Equipment Provided to Contractors

NASA routinely provided contractors operating off- and on-site with thousands of general purpose equipment items. GAO found numerous instances in which NASA contracting officers had provided equipment to off-site contractors without meeting FAR exceptions that would permit providing such equipment. Items included personal computers, printers, typewriters, telephones, filing cabinets, refrigerators, televisions, video recorders, fork lifts, clocks, snow throwers, toaster ovens, and lawn mowers. One NASA center provided an off-site service contractor with over 8,000 items of general purpose equipment valued at almost \$12 million under two contracts. These items ranged from inexpensive articles like waste baskets and lamps to a \$200,000 computer.

The routine provision of general purpose equipment was also prevalent for on-site contractors. NASA has established and interpreted its own regulations for on-site contractors in a manner that is inconsistent with the FAR. For example, at one center, NASA provided its grounds maintenance contractor with over \$500,000 worth of lawn mowers and other equipment. NASA also provided virtually all the general purpose equipment that was at the government-owned, contractor-operated plant GAO visited. Although permitted by the FAR, this practice provides little incentive for contractors to invest in needed equipment.

Further, some NASA contracting officers did not provide adequate oversight and approval of contractors' acquisitions of general purpose equipment. For example, at one center, some contracting officers inappropriately limited their approval of acquisitions to those costing more than \$10,000 on one contract, \$25,000 on others, and over \$100,000 for certain acquisitions on one contract. The FAR requires contracting officers to approve all acquisitions of general purpose equipment, regardless of cost.

NASA personnel also planned some contractors' fees or profits on a base that improperly included the estimated cost of contractor-acquired general purpose equipment. This practice potentially increases the fees or profits

that contractors may earn and tends to encourage contractors' reliance on the government to provide equipment to perform their contracts.

## Oversight of Contractor Equipment Is Inadequate

GAO reviewed elements of 13 contractor property systems and found that they had a variety of deficiencies, which ranged in significance and frequency. GAO found frequently occurring problems in controls over contractors' acquisitions, use, and reporting of equipment. Property administrators did not question during their periodic reviews whether contractors' acquisitions of general purpose equipment met any of the exceptions to the government policy requiring contractors to furnish their own equipment. Government property administrators believed it was solely the contracting officers' responsibility to determine compliance with this requirement.

Property administrators also did not ensure that contractors established minimum use levels, monitored equipment use against such criteria, and reported equipment items that were either improperly used or were excess to current or known future needs. For example, one contractor held more than 4,000 items of idle equipment valued at over \$33 million that, in many cases, had not been reported to NASA as idle. Two of these items, with a combined cost of more than \$40,000, were declared inactive 17 years ago.

In addition, NASA's system for using excess personal property as the first source of supply in fulfilling contractors' requirements has not been effective in identifying excess equipment for reuse. Among other problems, NASA contractors did not always screen other government agencies' excess lists, and one contractor had not done any screening for more than 3 years.

Outside these areas, GAO found less prevalent instances of noncompliance with property control procedures. These deficiencies included maintaining inaccurate property records, not conducting accurate physical inventories, not performing a lease-versus-purchase analysis, and inappropriately using government equipment. Government property administrators did not find many of the deficiencies GAO noted in contractors' property systems. In spite of these deficiencies, GAO's spot check of 503 items from the 13 contractors' property records located all but one item, a \$50 vacuum cleaner.

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## Reporting of Government Equipment Is Inaccurate

NASA lacked reasonable assurance that its contractors' property reports were reliable. Contractors' annual reports of government property were not adequately reviewed by government property administrators to ensure accuracy, and those reviewed by GAO contained numerous undetected inconsistencies and errors. Some contractors misclassified and misvalued millions of dollars of government property.

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## Recommendations

Because of the high dollar value of property provided to contractors and indications of systemic property management problems, GAO is making a series of recommendations to the NASA Administrator to

- improve compliance with government procurement policy for relying on contractors to furnish their own general purpose equipment and help reduce the amount of such equipment they hold for NASA;
- improve management and oversight of contractor compliance with government property regulations, particularly for equipment acquisitions and utilization; and
- increase the surveillance of contractor reporting of government property and provide additional assistance to contractors to help improve their reporting.

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## Agency Comments

As requested, GAO did not obtain official agency comments on this report. However, GAO discussed its contents with NASA officials and has included their comments where appropriate. In general, agency officials agreed with the findings and recommendations in this report.





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**Abbreviations**

COTR	Contracting Officer's Technical Representative
D&F	Determination and Findings
DOD	Department of Defense
FAR	Federal Acquisition Regulation
GAO	General Accounting Office
GOCO	Government-Owned, Contractor-Operated
GSA	General Services Administration
NASA	National Aeronautics and Space Administration

# Introduction

The National Aeronautics and Space Administration (NASA) began providing property to contractors even before its major space programs of the 1960s. In those early days, NASA contracted with firms that were also performing contracts with the Department of Defense (DOD), and NASA adopted procurement practices similar to those used by DOD. Since DOD provided plants, equipment, and other property to contractors, NASA contractors expected the same treatment, and the practice of providing government property to NASA contractors became established.

Today, NASA relies on contractors to carry out the majority of its programs; the agency spends almost 90 percent of its funds each year on contracts. In fiscal year 1992, the value of NASA procurements was over \$13 billion. NASA provides government property to contractors who perform a broad range of complex engineering and management services, including operating the space shuttle mission control center, processing the space shuttle for launch, operating test facilities, and recovering scientific data transmissions from space. NASA also provides property to research and development contractors such as those designing, developing, and testing the Space Station Freedom, and to other contractors performing more routine activities, such as custodial, photography, publications, public relations, warehousing, and guard services.

## Types of Government Property Provided to Contractors

Government property provided to NASA contractors consists of real property (i.e., land and buildings) and personal property.<sup>1</sup> Personal property includes materials, space property, general purpose equipment, special test equipment, and special tooling. Materials consist of raw materials or tools that may be incorporated into or attached to a deliverable end item or that may be consumed or expended in performing a contract. Space property is unique to NASA's aeronautical and space programs and includes items such as space shuttle orbiters, rocket engines, special cameras, and space suits.<sup>2</sup>

General purpose equipment, special test equipment, and special tooling are defined as follows:

<sup>1</sup>Government property can be provided to contractors in two ways: (1) It can be purchased or leased by the government and furnished to the contractor, or (2) it can be acquired by the contractor and charged as a direct cost to the contract.

<sup>2</sup>For financial reporting purposes, NASA categorizes only specially identified space flight items as space hardware. Space hardware is a subset of space property.

- General purpose (plant) equipment is used to help support activities such as production, maintenance, research, development, and testing. Examples of general purpose equipment are personal computers, lawn mowers, automobiles, fork lifts, furniture, and video recorders.
- Special test equipment consists of integrated test units engineered, designed, fabricated, or modified to do special purpose testing. It consists of items or assemblies of equipment that are interconnected to create a new functional entity for special testing purposes, such as unique space shuttle engine testing equipment. Special test equipment does not include equipment used for general testing purposes.
- Special tooling consists of specialized equipment and manufacturing aids, and their components; these are considered special tooling only if, without substantial modification or alteration, their use is limited to the development or production of particular supplies or parts, or to the performance of particular services. An example of special tooling is the tool used to manufacture the space shuttle orbiter wing.

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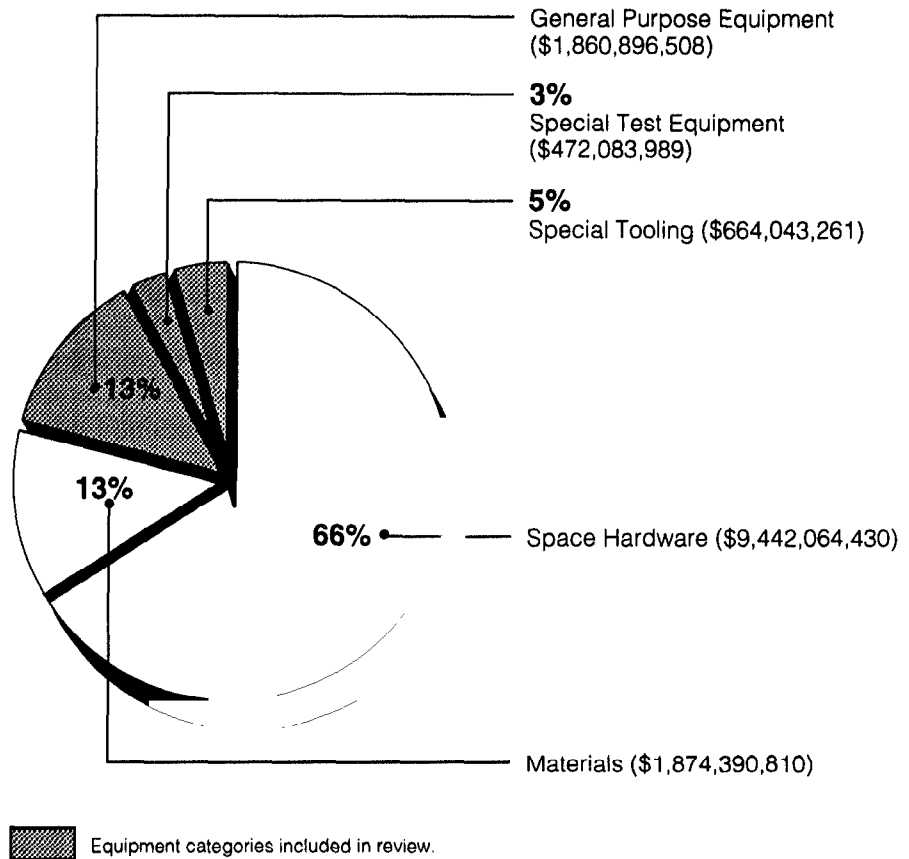
## Growth and Distribution of Government Equipment Provided to Contractors

According to NASA records, contractors held \$14.3 billion of agency-owned personal property in 1992. Of this amount, contractors held \$3 billion of general purpose equipment, special test equipment, and special tooling. Figure 1.1 shows the amount of general purpose equipment, special test equipment, special tooling, space hardware, and materials provided to NASA contractors as of September 30, 1992.<sup>3</sup>

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<sup>3</sup>The source of the contractor-held equipment values is the annual contractor Reports of Government-Owned/Contractor-Held Property (NASA Form 1018) as of June 30, 1992. NASA updates some of the contractor reports as of September 30. NASA uses the reports as a basis for reporting the value of contractor-held assets on its annual financial statements.

Figure 1.1: NASA Personal Property Held by Contractors as of September 30, 1992

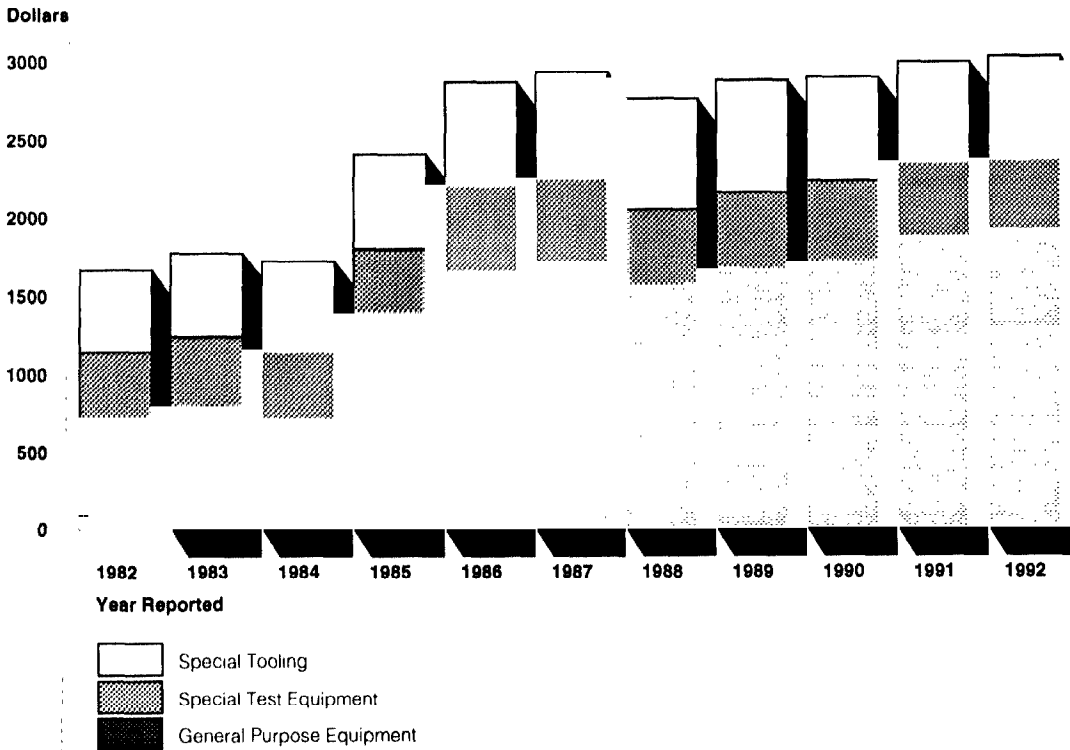


Source: NASA general ledger accounts.

NASA reported that the value of general purpose equipment, special test equipment, and special tooling provided to its contractors increased from about \$1 billion in 1982 to about \$3 billion in 1992. With adjustments for inflation, this total increased by more than 80 percent over the decade. Also, the value of general purpose equipment provided to contractors increased from \$488 million to \$1.9 billion during this period. With inflation adjustments, this total more than doubled. Between fiscal years 1988 and 1992, the value of special test equipment and special tooling increased by almost 9 percent, and the value of general purpose equipment increased by approximately 43 percent. Over the same period, contractor acquisitions of general purpose equipment averaged over \$400 million a

year, including \$748 million during fiscal year 1991 and \$414 million during fiscal year 1992. Figure 1.2 shows the trends in government equipment held by NASA contractors from 1982 through 1992 and incorporates adjustments for inflation.

**Figure 1.2: Growth in Reported Value of NASA Equipment Held by Contractors for 1982-92** (In Millions of 1992 Constant Dollars)



Source: NASA general ledger accounts.

The total value of government equipment provided to NASA contractors is even higher than indicated in this figure for two primary reasons. First, NASA financial reports, following standard government practice, require contractors to report only general purpose equipment items valued at \$5,000 and greater.<sup>4</sup> The total value of general purpose equipment provided

<sup>4</sup>NASA contractors are required to report all special test equipment and special tooling regardless of the acquisition value.

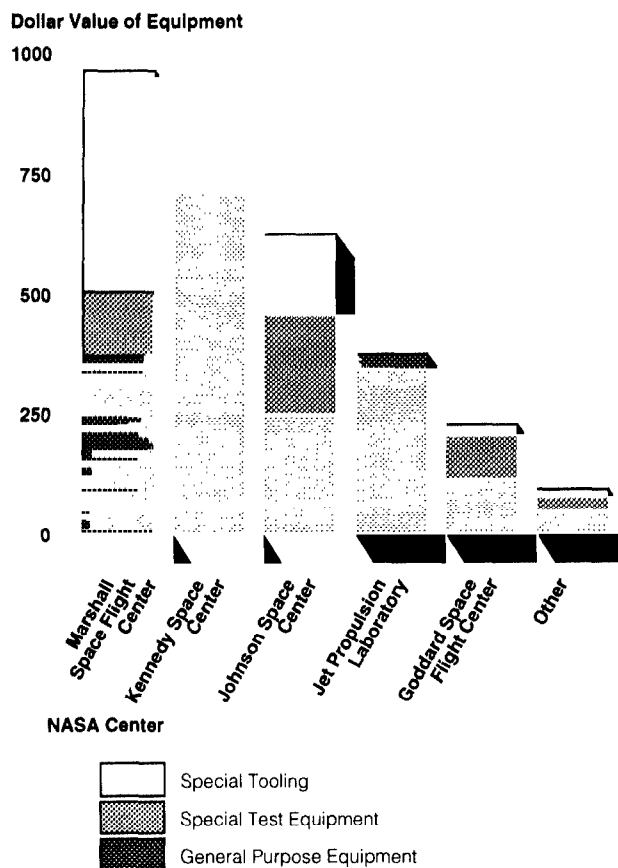
to contractors is at least \$340 million more, on the basis of NASA reports of contractor-held equipment valued at between \$1,000 and \$5,000. NASA could not provide an estimate of contractor-held equipment valued at less than \$1,000 because the agency does not capture such information in its equipment management system.

Second, NASA has permitted many contractors to use large amounts of government equipment for which NASA retains official accountability. For example, NASA provides grounds and building maintenance, printing, and duplicating equipment to contractors who perform such services on NASA centers. The value of this equipment is included in the total value of installation-held equipment.

In 1992, NASA provided about \$3 billion in equipment on 719 of its approximately 2,000 contracts administered by nine field centers (see fig. 1.3).



**Figure 1.3: Distribution of Contractor-Held Equipment as of September 30, 1992 (In Millions of Dollars)**



Note: The "Other" category includes Ames Research Center, Headquarters, Langley Research Center, and Lewis Research Center.

Source: NASA.

The three centers we visited provided contractors with approximately \$1.8 billion of the \$3 billion (about 60 percent) of the general purpose equipment, special test equipment, and special tooling. These three centers provided contractors with almost \$730 million in general purpose equipment (almost 40 percent of the \$1.9 billion).

## Key Players in Federal Property Management

The Federal Acquisition Regulations (FAR), the NASA FAR Supplement, and contract provisions specify government and contractor responsibilities for establishing and maintaining controls over government equipment provided to contractors. Personnel most directly involved in property management include the following:

- Contracting officers are the official government points of contact with the contractor. They negotiate contracts, approve property acquisitions, and ensure compliance with regulatory requirements.
- Contracting Officers' Technical Representatives (COTR) monitor the technical aspects of the contracts. The COTR is generally an engineer or scientist who works in the program office for which contract work is being performed. The COTR is required to determine that all equipment acquisitions are valid technical requirements of the contract and helps ensure that items are used as intended.
- Government property administrators help ensure that the contractor (1) is adequately controlling, protecting, preserving, maintaining, using, and reporting government property in accordance with the contract, FAR, NASA FAR Supplement, and other contractually imposed requirements and directions and (2) complies with its approved property control system. Property administrators perform these functions by conducting periodic analyses of contractors' property control systems. During these analyses, property administrators test (on a sample basis) contractors' compliance with government property management requirements. They also provide (1) property-related support and assistance to contracting officers and program managers and (2) direction to contractors. Government property administrators are NASA employees or personnel from DOD agencies when property administration functions are delegated.
- Industrial property officers are designated by each NASA center to manage and coordinate property matters with other responsible personnel, including contracting officers and their technical representatives, government property administrators, and contractor officials.
- Contractors are required to establish and maintain a property control system and property records to account for and safeguard the government property for which they are responsible.

To avoid duplication of effort, the government's policy is to rely almost entirely on contractors to manage and control the government property they hold. Contractor property records, with very few exceptions, are the official government records. The FAR prescribes that these records must identify all government property and provide a complete, current, and auditable record of transactions. NASA, as required by the FAR, relies almost

entirely on contractor records for management reports and other information. NASA also maintains additional records of government equipment held by contractors to assist efforts to reuse equipment.

The FAR and NASA FAR Supplement require government property administrators to review and approve each contractor's property control system following contract award and to perform periodic property system analyses. The purpose of the system analysis is to ensure that the contractor is complying with established internal controls, property management regulations, and contract provisions. The surveys cover 15 categories, including property acquisition, receipt, use, disposal, record keeping, and reporting. NASA either does the surveys using its own property administrators or delegates the property administration functions to DOD. Deficiencies noted during these surveys are reported to the contractor for prompt corrective action. If the contractor fails to establish and maintain an effective property control system and take corrective action when required, the government can disapprove the system and the contractor can be held liable for future losses of government property. NASA, however, rarely disapproves contractor property systems.

## Objectives, Scope, and Methodology

The Chairman of the Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, asked us to review NASA property management activities. Specifically, our objectives were to determine (1) NASA's compliance with federal regulations intended to minimize the amount of government-owned, contractor-held general purpose equipment; (2) the effectiveness of government and contractor controls over equipment; and (3) the adequacy of NASA's reporting of this equipment. During our review, we focused on general purpose equipment, special test equipment, and special tooling because (1) NASA had experienced high dollar growth in these equipment categories and because (2) FAR provisions for providing and controlling this equipment are stringent.

To evaluate NASA's compliance with federal regulations intended to minimize the amount of government-owned, contractor-held equipment, we visited NASA Headquarters, three NASA field centers, one government-owned, contractor-operated plant, one NASA test facility, and 13 contractor service and production activities. We judgmentally selected contractors to visit that held varying amounts of government equipment. The contractors we visited held over \$810 million, or 27 percent, of NASA's contractor-held general purpose equipment, special test equipment, and

special tooling. We reviewed contract files for the 13 contractors and evaluated written justifications, to the extent they were available, for providing government equipment to contractors. We also assessed whether the acquisitions of general purpose equipment were properly approved by responsible contracting officials and discussed the provision of equipment with cognizant procurement personnel.

At NASA Headquarters, we obtained summary reports on the amount of government property held by contractors, and we held discussions with Headquarters property and procurement officials. We also held discussions with NASA and DOD property administrators who provided property administration services at many NASA contractor locations and with other DOD property management officials.

To evaluate the effectiveness of government and contractor controls over property, we reviewed government property administrators' reports and files pertaining to the property control system analyses conducted at the selected contractors over the past 2 years. We reviewed these contractors' written property control procedures for government property and discussed contractor controls with the cognizant government property administrators and contractor property managers. We also selected a judgmental sample of government equipment items to verify their existence and to check the accuracy of contractor records. For the items included in our spot checks, we also reviewed equipment utilization controls.

To assess the adequacy of NASA's property reporting practices, we reviewed the annual reports of government-owned property held by the contractors we visited. We checked the accuracy of the reports and compared the property acquisition, disposal, and inventory information in the reports with the contractors' supporting documentation.

We conducted our audit work at the following locations:

NASA

- George C. Marshall Space Flight Center, Huntsville, Alabama;
- Goddard Space Flight Center, Greenbelt, Maryland;
- Lyndon B. Johnson Space Center, Houston, Texas;
- Michoud Assembly Facility, New Orleans, Louisiana; and
- White Sands Test Facility, Las Cruces, New Mexico.

Contractors

- Bendix Field Engineering Corporation, Columbia, Maryland;
- Boeing Defense and Space Group, Missiles and Space Division, Huntsville, Alabama;
- Computer Sciences Corporation, Science Systems Division, Calverton, Maryland.
- Hernandez Engineering, Inc., Houston, Texas;
- Krug Life Sciences, Houston Division, Houston, Texas;
- Lockheed Engineering and Sciences Company, Las Cruces, New Mexico;
- Loral Space Information Systems, Houston, Texas;
- Martin Marietta Manned Space Systems, New Orleans, Louisiana;
- McDonnell Douglas Space Systems Company, Houston Division, Houston, Texas;
- McDonnell Douglas Space Systems Company, Space Station Division, Huntington Beach, California;
- Raytheon Service Company, Annapolis Junction, Maryland;
- Rockwell International Corporation, Rocketdyne Division, Canoga Park, California; and
- Rockwell Space Operations Company, Houston, Texas.

As requested, we did not obtain official agency comments. However, we discussed the results of our work with responsible procurement, property management, and financial management officials at NASA Headquarters and centers and have incorporated their comments where appropriate.

We conducted our work between May 1992 and June 1993 in accordance with generally accepted government auditing standards.

# NASA Has Not Minimized the Amount of Equipment It Provides to Contractors

NASA has not effectively implemented a long-standing government policy that requires contractors to furnish much of the equipment needed to perform government contracts. The three centers we visited routinely provided such equipment under conditions that violated the FAR. Noncompliance with regulations contributed to the substantial growth in the value of government equipment held by NASA contractors and resulted in higher equipment and administrative costs for NASA. Also, NASA's established practice of providing general purpose equipment for use by on-site contractors is inconsistent with the FAR. In other situations, NASA provided equipment under conditions that were permitted by the FAR, but doing so may not have been in the government's best interest.

The three centers we visited also did not comply with regulations that establish internal controls over contractor purchases of general purpose equipment that are charged to the government. For example, many contractor purchases were made without the required contracting officer approval, and procurement personnel sometimes planned contractors' fees or profits on a base that improperly included contractor-acquired general purpose equipment. In addition to potentially increasing the fees or profits contractors may earn, this practice tends to encourage contractors' reliance on the government to provide equipment to perform contracts.

Some of these problems occurred because NASA procurement and program personnel were not adequately trained in property issues or familiar with many property regulations. In addition, NASA Headquarters officials have exercised limited oversight of government equipment provided to contractors and have given limited policy guidance to NASA centers in this area.

## FAR Restricts Government-Provided General Purpose Equipment

The FAR establishes the overall policy on providing equipment to perform government contracts. For many years, the FAR has prescribed that agencies should not provide general purpose equipment to contractors for any purpose, including restoration, replacement, or modernization, except

- for use in a government-owned, contractor-operated (GOCO) plant operated on a cost-plus-fee basis;
- for support of industrial preparedness programs;
- as components of special test equipment or special tooling acquired or fabricated at government expense;

- when the contractor states in writing that the company is unable to obtain the general purpose equipment needed to perform the contract, and the agency head or designee signs a Determination and Findings (D&F) statement that stipulates that the contract cannot be fulfilled by any other practical means or that it is in the public interest to provide the equipment;<sup>5</sup> or
- as otherwise authorized by law or regulation.

If one of the above exceptions applies, the FAR still prohibits the government from providing any item of general purpose equipment costing less than \$10,000 unless the contractor

- is performing on a government establishment or center,
- is operating a GOCO plant on a cost-plus-fee basis,
- is a nonprofit institution of higher education or nonprofit organization that conducts scientific research,
- is performing a contract that specifies that the contractor may acquire or fabricate special test equipment or special tooling and related components after obtaining contracting officer approval, or
- cannot obtain the equipment from other than government sources.

Over the years, the exceptions under the FAR that permit agencies to provide general purpose equipment to contractors have been limited. For example, a September 1989 change to the FAR removed an exception that permitted agencies to provide equipment to a contractor unwilling to provide its own equipment.

Decisions to not comply with FAR policies require the NASA Headquarters' procurement officer to approve a deviation. Permanent deviations affecting more than one contracting action require the agency to propose appropriate FAR revisions.

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## **Equipment Improperly Provided to Off-Site Contractors**

NASA contracting officers did not adhere to FAR restrictions on providing general purpose equipment to contractors operating at their own (or leased) facilities. Such violations were especially prevalent for service and operations contractors located near NASA centers.

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<sup>5</sup>A D&F is written approval required (by statute or regulation) for NASA to take certain contracting actions. The determination is a conclusion or decision supported by findings. The findings are statements of fact or rationale essential to support the determination and must cover each requirement of the statute or regulation.

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Contracting officers responsible for contracts with 12 of the 13 contractors we visited could not adequately justify their provision of equipment to off-site contractors under the limited exceptions to the overall FAR policy.<sup>6</sup> Specifically, these contracting officers

- provided government equipment to contractors without first asking them to provide their own equipment,
- did not obtain written statements that the contractors were unable to equip themselves before providing government equipment, and
- did not prepare the required D&F statements.

Failure to adhere to the FAR has progressed to the point that it had become standard practice for contracting officers to provide government equipment to contractors. Contractors we met with said they had come to expect NASA to provide such equipment routinely. NASA provided to its contractors millions of dollars worth of computers and related equipment and thousands of general purpose items like clocks, typewriters, vacuum cleaners, telephones, filing cabinets, paper shredders, telephone answering machines, snow throwers, and toaster ovens. Other items provided included \$5,000 video projectors, a \$6,300 color scanner, a \$108,000 high speed printer, a \$36,000 color copier, and decorative models of the space shuttle. Specific examples of improperly provided government equipment are shown in appendix I.

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## NASA's Rationale for Providing Equipment

NASA procurement officials told us that government equipment is provided to contractors primarily because NASA wants to retain title. They said that retaining title may be in the government's best interest because it enhances future competition among contractors; eases the transition to a new contractor; and ensures that equipment is available when needed, is of acceptable quality, and is compatible with existing systems. However, current regulations provide alternative ways for dealing with these issues. For example, the NASA FAR Supplement requires contracting officers to develop procurement plans to address the recovery of contractor equipment costs and the feasibility of the government's acquiring the right to use the equipment for longer than the proposed contract period. One strategy is to require the contractor to purchase the equipment and, at the completion of the contract period, require the contractor's successor to purchase it at its depreciated value.

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<sup>6</sup>A FAR exception applied to one of the contracts we reviewed because the contractor operated a GOCO facility.



NASA officials also stated that providing government equipment can be more cost-effective to the government than requiring contractors to provide their own equipment. Other officials noted that NASA may lower contract costs, in some circumstances, by offering existing equipment to contractors. However, contractor ownership of equipment may result in the government's only partially paying for the equipment if the equipment costs were allocated among both government and commercial customers. Several contractor officials told us they would be interested in seeking commercial or other government business, which would spread their equipment costs among all users, resulting in a lower cost to NASA. However, contractor efforts to seek commercial work are hampered because contractors do not own the equipment and government equipment cannot be used to do commercial work without the contracting officers' permission.

When providing equipment to contractors, the government also incurs additional costs not charged directly to specific contracts. These include the substantial indirect administrative costs that contractors pass on to the government for maintaining an approved property control system, safeguarding the equipment, and disposing of excess. One contractor, recognizing the difficulty and expense of controlling government property, has initiated a program to reduce its inventory by more than 2,000 inexpensive, NASA-provided items. The contractor has estimated that it costs more annually to control most of these items than their original cost. The contractor estimated that it costs between \$100 and \$150 each year to control each item of NASA property provided to them and that costs would be much less if the contractor managed the property under its own property control system. NASA pays the contractor to control agency-provided property through indirect charges to the contract. The contractor has already disposed of hundreds of inexpensive items, including wastebaskets, which cost about \$2.00 each, and lamps, clocks, desks, and chairs.

The government also generally pays for replacing government equipment held by contractors that is lost or damaged. In contrast, contractors are responsible for replacing their own equipment that they lose or damage. During fiscal years 1991 and 1992, NASA contractors received relief from liability for lost or damaged government equipment valued at about \$8.2 million.

Several contractor officials claimed that some contractors might not be willing or able to provide the capital funds needed to furnish the

equipment required to perform their NASA contracts. Therefore, they might reconsider competing for future contracts or request renegotiations if required to furnish their own equipment. However, if such cases arise involving crucial contractors that NASA cannot risk losing, several incentives are available to help NASA encourage these contractors to furnish their own equipment. Such incentives include increasing fees to reward contractors for investing in equipment, paying the contractors' cost of borrowing money, and using a fee arrangement in which contractors share in cost savings resulting from contractor capital investments in technologically advanced equipment.

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### **Recent Improvements in Government Property Management**

NASA officials at the centers we visited have taken steps to improve government equipment management. In July 1992, Goddard Space Flight Center announced a policy to comply with the FAR and generally prohibit providing general purpose equipment to off-site contractors. Previously, Goddard had provided millions of dollars of equipment to contractors operating near the center. Recent steps taken include increasing emphasis on developing the required D&F statements to justify providing equipment valued at \$10,000 or higher to contractors. These statements will even be developed for some current contracts, one official noted. Also, the center will no longer routinely provide general purpose equipment valued at less than \$10,000 to contractors.

In addition, a Goddard contracting officer told us that he is negotiating a modification on an existing contract that will require the contractor to replace current government equipment with contractor equipment as the government equipment becomes obsolete or unusable. The contracting officer also said this requirement may be included in some future follow-on contracts until all current government-owned equipment is replaced by contractor-owned equipment.

In August 1993, the Johnson Space Center Director of Procurement issued a memorandum requiring contracting officials to comply with the FAR policy on providing general purpose equipment to off-site contractors. In addition, center procurement personnel have begun to change the language in requests for proposal to require prospective contractors to furnish the general purpose equipment needed for their contracts. For example, one contract currently being planned would require the contractor to provide general purpose items such as personal workstations and engineering equipment, computer-aided design equipment, and communication equipment.

At NASA Headquarters, officials are developing guidance on providing government equipment to contractors. Since 1992, NASA Headquarters' procurement officials and property managers have been finalizing a draft pamphlet entitled "Guidance on Providing Government Facilities to Contractors." When issued, this pamphlet will be the first official Headquarters guidance to center procurement personnel on providing government equipment to contractors.

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## NASA Policies Encouraging Provision of Equipment to On-Site Contractors Are Inconsistent With the FAR

NASA's established practice of providing general purpose equipment for use by on-site contractors is inconsistent with FAR restrictions on providing such equipment to contractors operating on government installations.<sup>7</sup> We reviewed contracts under which NASA routinely allowed the use of government equipment by on-site contractors. The contract files did not contain the justifications required by the FAR for providing general purpose equipment to contractors.

At the Johnson Space Center, contractors are generally prohibited from bringing their own equipment on-site. Thus, virtually all equipment used by on-site contractors at Johnson is government provided. NASA officials told us this policy was established to prevent security and safekeeping problems that might result from commingling government and contractor-owned equipment and to avoid the duplicative costs of maintaining separate property control systems. However, Johnson contractors operating at their off-site plants routinely control both government and contractor-owned equipment without accounting and security problems.

At the Goddard Space Flight Center, a wide range of general purpose equipment has been routinely provided for use by on-site contractors. Goddard procurement officials told us that the NASA FAR Supplement permits NASA to provide such equipment to on-site contractors without justifying these actions with a D&F. They cited two NASA FAR clauses as support. First, NASA's Installation Provided Government Property clause states that "certain government property identified in the contract shall be made available to the contractor on a no-charge-for-use basis." Goddard uses this clause when the government property is to be provided to on-site contractors and the government retains accountability. Second, officials noted, the NASA FAR Supplement permits the provision of general purpose

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<sup>7</sup>FAR policy on providing general purpose equipment to on-site contractors is generally the same as for providing equipment to off-site contractors.

equipment to on-site contractors without a D&F. Under the FAR, however, a D&F is required to justify the provision of such property.

Under the NASA FAR Supplement, NASA has provided on-site contractors with millions of dollars worth of general purpose equipment such as lawn mowers used by grounds maintenance contractors, vehicles used by transportation contractors, vacuum cleaners used by custodial contractors, and printing and reproduction equipment used by publications contractors. For example, one center provided its grounds maintenance contractor with about \$500,000 worth of lawn mowers and other equipment. At a center's test facility, NASA provided a contractor with thousands of general purpose equipment items including basketball goals, weights, and other exercise equipment for the contractor's fire protection personnel. The only equipment provided by this contractor was a payroll check writing machine.

NASA also incurs the costs to maintain and store this equipment. Requiring on-site contractors to privately finance and use their own equipment, when it is reasonable to do so, could reduce NASA's costs of obtaining services especially if the costs were shared with the contractors' commercial customers. According to the NASA FAR Supplement, an additional benefit of requiring contractors to furnish their own equipment is that they could not contend that problems in contract performance had stemmed from NASA's failure to provide adequate equipment on a timely basis.

In contrast, the U.S. Army's policy since September 1989 has been not to provide new general purpose equipment to on-site contractors. Under this policy, the Army allows installation support services contractors to use existing government-owned general purpose equipment when the contracting officer makes a written determination that providing the equipment is in the government's best interest. However, the equipment is provided with the understanding that the contractors will furnish equipment when government-provided equipment needs to be replaced.

The Civilian Agency Acquisition Council and Defense Acquisition Regulation Council have proposed to the FAR Secretariat a change to the FAR that will permit the government to provide equipment to on-site contractors when it is in the government's best interest and the reasons for providing the equipment are appropriately documented. NASA officials said the change would improve their ability to manage the provision of

government equipment to contractors. However, as of August 1993, the proposal had not been approved.

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## **NASA Policies Encourage Provision of Equipment to Contractors on Government-Owned, Contractor-Operated Facilities**

FAR provisions currently permit the government to provide general purpose equipment to contractors that operate GOCO plants. NASA's practice has been to provide virtually all of this equipment, including office furniture, vehicles, and cafeteria equipment. Such a practice provides little incentive or motivation for contractors to invest in equipment needed for their contracts. In contrast, at a similar DOD plant, the contractor has furnished millions of dollars worth of company-owned equipment to perform its contracts and is required to furnish company equipment when government-provided equipment needs to be replaced.

The proposed change to the FAR will also (1) require the government to document the reasons for providing equipment to contractors that operate on GOCOS and (2) give NASA the opportunity to re-evaluate its policy to routinely provide equipment to these contractors. In recent years, one contractor operating a NASA GOCO was allowed to provide some of its own furniture.

NASA officials said that, until recently, the agency had not examined divesting any of its GOCO plants or requiring contractors to provide their own equipment. However, a governmentwide space technology study and recent decisions to reduce the space shuttle flight rates will provide an opportunity for NASA to consider divesting plants or excess equipment and reduce the amount of government equipment held by contractors that operate government-owned facilities.

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## **Contractor Acquisitions Not Properly Overseen**

In addition to NASA's improperly providing equipment to some contractors at the centers we visited, contracting officers often did not adequately oversee and approve contractor acquisitions, as required by the FAR. Procurement personnel also sometimes improperly included proposed contractor acquisitions of general purpose equipment in negotiating contractor fees.

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## **Contracting Officers Did Not Adequately Oversee and Approve Contractor Acquisitions**

Under the cost reimbursement contracts typically used by NASA, FAR policies and procedures require contracting officers to provide written approval before contractors acquire any item of general purpose equipment, regardless of the dollar value. This requirement is a key control

over such acquisitions and is intended to help ensure that all contractor acquisitions of government equipment are reasonable and in the government's best interest.

Contracting officers responsible for overseeing 10 of the 13 contracts we reviewed did not understand, or ensure compliance with, government regulations regarding the approval of contractors' acquisitions of equipment prior to purchase. Contracting officer actions ranged from providing the required approvals to providing approvals in only limited circumstances. Contracting officers at Goddard generally approved acquisitions of equipment valued at \$1,000 and greater. At Marshall, contracting officers' approval levels varied by contract and ranged from approval of all equipment acquisitions to approval of only those valued at \$5,000 and greater. In contrast, at Johnson, contracting officer approval was not obtained for the acquisition of items costing less than \$10,000 on one contract, \$25,000 on others, and up to \$100,000 for certain acquisitions on one contract. Several contracting officers had, in effect, delegated their acquisition review responsibilities to contractors or to NASA technical monitors. More details on these and other examples of inadequate contracting officer oversight and approvals of contractor acquisitions of government equipment are listed in appendix II.

Several procurement personnel said it would take contracting officers an inordinate amount of time to provide advance consent for all contractor acquisitions of equipment. However, if contracting officers adhered to the government regulations and required contractors to furnish their own general purpose equipment, the volume of purchase orders for government equipment would be much less since contracting officers would only be requested to approve acquisitions of general purpose equipment that met one of the FAR exceptions. One contracting officer who required contractors to obtain advance consent before acquiring any general purpose equipment told us that the practice forces the contractor to justify each item needed and has reduced the total amount of equipment purchased and charged to the government.

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**Procurement Personnel**  
**Improperly Included**  
**Contractor Equipment**  
**Acquisitions in Planning**  
**Fee Calculations**

For cost reimbursement contracts, the FAR prohibits contractors from receiving fees or profits on the cost of general purpose equipment purchased for the government. Such prohibitions have generally applied to contracts for the acquisition of general purpose equipment (facilities contracts). With limited exceptions, the FAR requires providing general purpose equipment to contractors only under facilities contracts. In

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addition, the FAR was clarified to prohibit the payment of fees or profits for equipment acquisitions on all other types of contracts awarded after January 21, 1991.

However, NASA procurement personnel at two of the centers we visited sometimes planned contractor fees on a cost base that improperly included the estimated cost of such equipment. Including equipment costs in the base used to estimate contractor fees could have resulted in increased fees available for contractors to earn. Further, this practice conflicts with federal procurement policy to encourage contractors' capital investments and reward increased productivity and reduced costs through the use of modern manufacturing technology.

In planning for procurements under cost reimbursement contracts, contracting personnel estimate the fee a contractor should be entitled to earn, establish a fee objective, and negotiate with the contractor to settle upon a reasonable fee that could be earned under the contract. Fees are generally based upon the estimated costs of performing the contract and other factors, such as the complexity of the work, the resources required, the management and technical effort needed to obtain materials, the complexity of direct and indirect labor requirements, and the contractor's capital investments. In such an environment, it is not possible to determine precisely the effect that considering general purpose equipment costs has on the negotiated fee. However, since the contract's estimated total costs would be lower if general purpose equipment costs were excluded, the fee objective and, in turn, the negotiated fee might also be lower.

We found instances in which contracting officers improperly included the cost of contractor-acquired government equipment in the base used to estimate contractor fees. For example, in recompeting a 5-year medical research support contract in March 1991, NASA partly based the contractor's fee on an estimated amount of materials the contractor would be required to purchase to operate government laboratories and conduct research. Equipment costs were included in the estimated amount of materials, on which a 4-percent fee was negotiated. According to the contractor's property reports, during the 1991 reporting year, the contractor acquired almost \$2 million of general purpose equipment for the government.

On another contract, procurement personnel said they had paid fee based on the cost of a commercial X-ray machine valued at over \$2 million to

recognize the contractor's efforts to acquire the equipment. The officials said that they would attempt to recover fees paid on such acquisitions.

On two contracts, procurement personnel had properly excluded estimated equipment costs from the cost base used to develop the fee objective. On several other contracts, we were unable to determine from the contract file documentation whether general purpose equipment was excluded from the cost base used to estimate fees.

Unless contracting personnel document their efforts to exclude proposed general purpose equipment costs in establishing fee objectives, NASA cannot be assured that fees are not inappropriately based on such costs. However, other than the FAR, there is little implementing guidance available to procurement personnel on excluding the estimated cost of general purpose equipment to be acquired for the government from the base used to determine potential contractor fees. In 1992, Goddard procurement officials issued local instructions to contracting personnel to exclude general purpose equipment costs from the total cost estimate before calculating profits. As of June 1993, Marshall and Johnson procurement offices had not issued similar instructions.

Procurement planners have available a variety of other techniques to preclude future confusion and ensure that appropriate fee objectives are established. These techniques include the development of separate no-fee schedules, an explicit statement that the determination of fee was not based on equipment costs, or provision for all authorized general purpose equipment under a separate no-fee facilities contract, which the FAR requires for certain contractors holding government equipment valued at over \$1 million at any single location.

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## **Impediments to Effective Implementation of Government Property Provision Policies**

Several other factors impede the effective implementation of federal procurement policy to limit the amount of government equipment provided to contractors. These include the lack of adequate property-related training for NASA procurement and program personnel, and, until recently, limited NASA Headquarters' guidance to the centers regarding contractor acquisitions of general purpose equipment. An additional factor, the failure to involve property specialists at key points in the procurement process, is discussed in chapter 3.



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**NASA Procurement and  
Program Personnel Lack  
Adequate Property  
Training**

Many contracting officers had limited awareness of government property management issues, and several were not familiar with the FAR requirements on providing government equipment to contractors or acknowledged they had misinterpreted the regulations. Some contracting officers also said that they had never received property training and were not aware of training courses on government property management. Government property management receives limited coverage during NASA's standard training curriculum for contracting officers and program managers.

NASA has taken steps to help educate contracting officers and other center personnel about property-related issues and requirements. Property management issues were presented at a NASA contract and subcontract management seminar for the first time in May 1993; the seminar included several discussions on the acquisition of government property. In addition, Goddard property personnel offer training on government property management to contracting officers. Center property personnel believe the training is helping to improve the overall management of government property.

In addition to limited knowledge of, and training in, property issues, staffing changes among NASA contracting personnel impeded their understanding of property issues on contracts for which they had responsibility. For example, one contracting officer, who recently assumed responsibility for a contract, was unaware that the center had provided the contractor with more than \$600,000 worth of government equipment at an off-site location. Another newly assigned contracting officer did not know about the reclassification of millions of dollars worth of equipment on two contracts for which he was responsible. A procurement official suggested that sometimes there is no orderly transition when contracting personnel assume responsibility for ongoing contracts and that an increased emphasis on briefing them about their contracts is needed.

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**Limited Guidance From  
Headquarters**

The NASA Headquarters procurement office has historically not provided property guidance to center procurement organizations. This office is responsible for overseeing the centers' compliance with acquisition regulations, while Headquarters property managers oversee the centers' compliance with property management regulations. Not until recently did the procurement office begin planning to provide specific guidance to

contracting officials regarding providing government equipment to contractors.

According to Headquarters' property survey reports, Headquarters property managers, who are NASA's experts on managing government equipment provided to contractors, have been aware for years that contracting personnel were inappropriately providing general purpose equipment to contractors. They conveyed their concerns during their surveys of center property management offices, during various training seminars, and through discussions with Headquarters procurement officials.

Headquarters procurement officials, on the other hand, did not require center procurement officials to enforce the FAR policies on providing equipment to contractors. Only one of the Headquarters procurement management surveys at the centers we visited took issue with the provision of government equipment to contractors. This April 1993 survey of procurement activities at the Johnson Space Center noted that contract files lacked the required justifications for providing government equipment to contractors and the required contracting officers' advance consent authorizing contractors to acquire government equipment. The report also noted that procurement personnel were not familiar with FAR requirements regarding providing government equipment to contractors. A Headquarters Office of Procurement official told us that the procurement management survey guide will be revised in November 1993 to provide for coverage of justifications required for contractor-acquired general purpose equipment. The current guide does not adequately provide for such coverage.

## Conclusions

NASA has frequently not complied with FAR policy that calls for contractors to furnish most of the general purpose equipment needed to perform their contracts and has used practices that are inconsistent with the intent of that policy. NASA's failure to minimize the amount of general purpose equipment provided to contractors is one reason why the value of agency-owned, contractor-held equipment has almost tripled in the past decade, from \$1 billion to about \$3 billion.

Noncompliance was caused by limited knowledge or misunderstanding of current policies and rules regarding government property and by ineffective oversight. Moreover, in providing property to on-site contractors, NASA has established and interpreted its own regulations in a

manner that is inconsistent with the FAR. NASA also provided equipment to contractors operating on government-owned plants under conditions that were permitted by the FAR, although doing so may not have been in the government's best interest.

NASA procurement officials also did not provide the required oversight to ensure that their contractors' purchases of equipment were proper and authorized. NASA personnel also occasionally planned contractors' fees or profits on a base that improperly included the estimated cost of general purpose equipment the contractor was expected to acquire for NASA.

The pending changes to the FAR regarding government property provide an opportunity for NASA procurement officials to reassess current practices and develop consistent guidance on when government property should be provided. When issued, headquarters' policy guidance on providing equipment to contractors will be a positive step.

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## Recommendations

We recommend that the NASA Administrator

- require procurement organizations to enforce FAR requirements on providing general purpose equipment to contractors and on obtaining contracting officer consent before contractors acquire such equipment;
- develop and promulgate an agency strategy that (1) minimizes the amount of general purpose equipment provided to contractors, (2) includes criteria to guide the decision on when the equipment should be provided to contractors, and (3) addresses the use of incentives to encourage contractors to provide their own equipment;
- revise the NASA FAR Supplement to (1) require contractors to gradually replace any government-owned general purpose equipment they currently possess or that has been made available for their use when the equipment can no longer be used and such equipment is still needed to accomplish the contract, (2) add a policy statement to prohibit contractor acquisitions of general purpose equipment for the government unless expressly approved in advance or identified item by item in the contract or by modification to the contract, and (3) make consistent NASA's documentation requirements for providing general purpose equipment or making equipment available for use by contractors operating on a NASA center with those in the FAR;
- revise procurement management survey guidelines to provide for coverage of center compliance with FAR policies and regulations on providing general purpose equipment to contractors;

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- require all contracting personnel, program monitors, and NASA property administrators to be sufficiently trained in government property issues; and
  - require procurement personnel to clearly document that general purpose equipment costs are excluded from bases used to establish fee objectives, using techniques such as separate no-fee schedules, an explicit statement that the determination of fee was not based on equipment costs, or provision for all authorized general purpose equipment under a separate no-fee facilities contract.

# Inadequate Controls Over Government Equipment Held by Contractors

The property systems of all 13 contractors we reviewed had a variety of deficiencies. The deficiencies ranged in significance from frequently occurring problems in controls over contractors' acquisition, use, and reporting of equipment to less prevalent instances of noncompliance with property control procedures. These included maintaining inaccurate property records, not conducting accurate physical inventories, not performing a lease-versus-purchase analysis, and inappropriately using government equipment. In spite of deficiencies, our spot check of more than 500 items from the 13 contractors' property records located all but one item.

Government property administrators did not find many of these deficiencies during their periodic property system analyses, and one property administrator approved a contractor's system that had major deficiencies. Some contractor property managers told us they lacked staff to give adequate attention to all aspects of property management. Further, some contractors' staffs were not adequately trained to manage and control property effectively. One contractor's property manager acknowledged that the company, which had recently moved to an off-site location, was confused about which property regulations governed the millions of dollars worth of government equipment the contractor held.

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## Control Problems With Equipment Acquisition and Use

Our work at selected contractors disclosed that government property administrators did not fully determine during their property system analyses that contracting officers appropriately approved contractor equipment purchases and that the government should have provided the equipment. Also, contractor and government controls over evaluating equipment use did not ensure that improperly used or underused equipment was made available in a timely fashion to others.

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## Property Administrators Did Not Effectively Oversee Acquisitions

NASA property management regulations require property administrators to determine during their periodic system analyses if contractor equipment acquisitions were authorized in their contracts or by contracting officers. However, in implementing this requirement, government property administrators often accepted approvals of acquisitions from unauthorized NASA or contractor officials. In addition, property administrators did not always ensure compliance with FAR policies that are intended to limit government equipment provided to contractors. Contracting officers did not consistently provide the required approvals for equipment acquisitions

prior to purchase. However, property administrators did not question whether the items were properly approved. They told us that a contractor's acquisition procedures may not require the contracting officer's approval on all purchases, and they often accepted statements from NASA technical representatives or contractor management personnel that the contractor was authorized to acquire government equipment.

Property administrators also frequently did not determine whether these acquisitions complied with FAR restrictions on providing equipment to contractors. Under current procedures, property administrators should examine acquired items to determine if the property is appropriate for direct charge under the contract. However, at the centers we visited, NASA's contracting and property management officials' position is that this responsibility rests exclusively with NASA's contracting officers and, as one member of the contract administration team, the property administrators are reluctant to question contracting officers' actions.

Government property administrators are in a unique position to routinely review contractor acquisitions for compliance with the FAR because of their knowledge of government property issues. As such, they must be alert for improper contractor acquisitions and should question instances in which acquisitions appear inconsistent with FAR policies. This role would necessarily involve inquiring of the contracting officer whether acquisitions were properly justified according to FAR policies.

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### **Equipment Use Is Not Adequately Evaluated**

Once equipment had been acquired, government property administrators and contractor property managers did not adequately evaluate its use or the need for contractors to retain it. Property administrators did not enforce compliance with some FAR equipment utilization requirements, and they did not adequately identify a variety of items that contractors should have recorded as inactive and made available to others. Because contractors charge NASA for storing and reporting on this equipment, these retention decisions have attendant costs. In addition to allowing contractors to retain equipment they had not used in years, NASA centers were also routinely transferring equipment to follow-on contracts without the required needs assessment.

To ensure that contractors properly use the property they obtain, the FAR requires they establish a minimum level of use and maintain use data for general purpose items costing at least \$5,000. If use falls below the minimum levels, an analysis of need should be done and continued

retention should be justified. Only 2 of the 13 contractors we visited had established specific minimum use criteria or recorded detailed equipment use data. One contractor recorded data for general categories of equipment located in specific departments or areas. Another contractor had established standards and retained usage information for some equipment located in one small laboratory. Another contractor that did both NASA and DOD work maintained utilization records and assessed retention annually on DOD equipment, but not on NASA equipment.

As was the case with acquisitions, NASA and contractor personnel do not adequately apply FAR requirements to equipment utilizations. For example, contractor and government property officials told us that NASA does not require contractors to keep utilization records because it is impractical to maintain them. In one case, NASA delegation instructions to a property administrator specifically excluded the requirement to evaluate equipment utilization. Contractor and property administration personnel said that the requirement for utilization records applied only to production or similar process-oriented equipment. The FAR makes no such distinction.

While the FAR also requires utilization records to ensure that government equipment use is properly authorized and costs are appropriately allocated among contracts, determining proper authorization and cost allocation is often not an issue in NASA contracts. Many NASA contractors have only one contract, use government equipment only to perform NASA contracts, and establish separate sites to perform these contracts.

At 10 of the 13 contractors we visited, we found varying amounts of equipment that were improperly used or excess to current or known future needs, as illustrated below.

- A contractor improperly used idle NASA equipment valued at \$8,354 for independent commercial research and development without obtaining the contracting officer's approval or reimbursing the government. The DOD property administrator was unaware that government property was being used inappropriately.
- A contractor held more than 4,000 items of equipment valued at over \$33 million that were classified as "inactive" on its property records but in many cases were shown as "active" on NASA's equipment management records. Therefore, these items were not visible to others as potentially available. The contractor said NASA wanted to retain this equipment for providing future production capability, if needed. Of the general purpose items valued at \$5,000 or greater, 50 items that cost about \$800,000 had

been inactive for at least 2 years, including a 1964 model hydrogen test console that cost \$29,620 and a 1963 model hydraulic pump that cost \$14,159. Both items were declared inactive 17 years ago.

- A contractor stored floor finishing equipment valued at \$11,000, including a chemical mixing machine that had not been used since March 1991. The contractor's property administrator said the equipment was being retained in the event a future need materialized, but no need was currently known.
- A contractor stored electronic equipment, some of which had been labeled as "out of order" as far back as 1981, in an attic storage area. A contractor official said that the equipment is not currently in use but that the contractor planned to use some of the equipment at a later date and, therefore, desired to retain it.

In addition, a contracting officer authorized a contractor to use previously acquired equipment on a contract on a rent free, non-interference basis, as long as it was not used more than 25 percent of the time on the new contract. However, the contractor did not maintain utilization records, and NASA's property administrators could not determine if the contracting officer's restrictions were being enforced.

The FAR also requires that equipment used beyond the contract period for which it was provided be justified for retention. However, when NASA renewed or recompleted contracts, procurement personnel did not always require contractors to justify retaining government equipment. In fact, one contractor had not accurately inventoried items provided as government furnished equipment from a predecessor contractor, and the contractor's property management did not discover the inaccurate data for over 2 years. Another contractor, who transferred equipment to a follow-on contract without a detailed assessment of continued need, explained that no assessment was made because contractor property managers routinely assessed the continued need for all government equipment it held.

Property administrators believe they can adequately monitor utilization by observing equipment during their property system analyses. However, without adequate utilization data, property administrators have little basis on which to question retention of infrequently used items. Property administrators acknowledged that even when they identify equipment that is not being adequately used, they cannot require contractors to return the equipment to NASA if NASA program managers say there are potential uses for it.



Allowing contractors to retain property for potential use may sometimes be in the government's best interest. However, properly deciding to retain equipment requires full disclosure of the equipment's utilization status. Contractor property managers told us that they do not notify NASA property personnel when equipment becomes inactive if NASA program managers decide to retain the items for possible future use. Their general policy is to report only inactive items that they declare excess to their needs. However, a NASA property management official told us that contractors should report any change in the utilization status of government equipment.

### Little Excess Equipment Being Reused

The FAR requires that, when practical to do so, agencies use excess personal property as the first source of supply in fulfilling their requirements and those of their cost-reimbursement contractors. NASA regulations require that, prior to acquiring new equipment valued at \$1,000 or more, NASA's equipment management system be screened for available used equipment. Representatives of almost every contractor we visited, however, told us that they rarely, if ever, found equipment through screening NASA's system. One contractor's property manager told us his company had performed 1,271 screening procedures over the past 5 years and had found only two items, neither of which was acceptable after further inquiry. Only four contractors told us they had located any available and usable equipment from their screening process, and the value of equipment reused was small.

There are two main reasons why the screening process was not effective. First, many of the items NASA contractors need are state-of-the-art and are not likely to be found on excess inventory lists. Second, screening procedures are fundamentally flawed and make finding potentially useful items more difficult. To save costs, NASA requires all but a few of its largest contractors to screen microfiche listings of excess inventory instead of providing direct access to NASA's equipment management system.

In addition, property administrators and contracting personnel did not consistently ensure that their contractors did appropriate screening. For example, between April 1989 and January 1993, one contractor annually purchased about \$25 million in inventory items, including equipment, without screening NASA's equipment management system. A contractor official told us that, until recently, the company did not understand that screening prior to acquisition was required. Government property administrators and NASA procurement and property personnel had not

identified the contractor's noncompliance with screening requirements until 1992. Property administrators had not discovered the failure to screen during three annual system surveys, and contracting personnel had approved acquisitions during that period without determining if the contractor had conducted the required screening. In January 1993, the center approved the contractor's screening of NASA's equipment database prior to buying new government equipment.

As previously noted, contractors were sometimes not reporting unused or infrequently used items as idle or excess to their needs. Therefore, other contractors had no way of knowing about items that were potentially available. When such items finally were reported as available, they were usually broken or outdated.

Some contractors we visited only screened NASA's excess equipment list and did not do required screening of similar lists of other government agencies, such as those of the General Services Administration (GSA). Further, some contractors we visited generally looked for specific manufacturer names and model numbers instead of screening for similar types of items as substitutes. Since similar items were not searched for and model numbers change, exact matches were infrequent. In some instances, center officials noted, there are legitimate technical reasons for screening for a specific item of equipment.

According to a NASA property management official, NASA has begun studying alternatives to the current system of maintaining a separate data management system solely for reutilization purposes. Alternatives being considered include eliminating the current reutilization database maintained by NASA and using another NASA database being developed for disposal processing or listing NASA excess items on DOD or GSA excess reutilization systems. Other alternatives that we believe might contribute to more cost-effective screening procedures include (1) providing incentives to contractors to reuse excess or idle inventory; (2) requiring government property administrators or other government personnel, instead of contractor personnel, to do screening; (3) providing contractors direct access to NASA's equipment reutilization database; (4) requiring screening of other agency excess property systems; and (5) requiring generic screening unless brand name and model preferences are specifically justified.

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## Other Control Procedures Existed but Were Not Consistently Implemented

Outside the areas of reviewing contractor purchases and evaluating equipment use, written procedures and controls on government equipment held by the contractors we reviewed generally complied with the FAR, NASA FAR Supplement, and NASA contract requirements. However, contractor and government personnel did not consistently implement the controls.

All 13 contractors we reviewed had approved property control systems. We selected 503 items from the 13 contractors' property records and found all but one item, a \$50 vacuum cleaner. But, all 13 systems contained one or more control weaknesses that varied in significance, such as maintaining inaccurate property records, not conducting a lease-versus-purchase analysis, not adequately conducting physical inventories, and inappropriately using government equipment. For example, two contractors failed to tag and record eight items valued at over \$750,000. More details on these and other examples of control weaknesses are listed in appendix III.

Some centers have taken steps to address weaknesses in contractor controls over government equipment. For example, NASA contracting officials at one center withheld about \$31,000 in award fees from a contractor as a result of problems identified during the annual property system analysis. To earn this award fee, the contractor was required to prepare a corrective action plan for complying with government property procedures. The contractor hired a property administrator to address the problems and initiated a program that resulted in a satisfactory rating for its property system in 1992.

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## Conclusions

In many instances, government property administrators from NASA and DOD and contractor property managers were not adequately overseeing contractor property management systems. Although we located all but one of the items we searched for during our spot checks at contractor locations, there were a variety of deficiencies in the property systems of the 13 contractors we visited. These contractors held 27 percent of the general purpose equipment, special test equipment, and special tooling that NASA provided to contractors. Deficiencies included unapproved acquisitions; failure to monitor equipment usage; inadequate identification and screening of excess equipment; and to a lesser extent, inventory weaknesses. These weaknesses can lead to unnecessary purchases by contractors and contribute to growth in the value of contractor-held equipment. While our work focused on specific centers and contractors,

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the prevalence of some deficiencies and widespread weaknesses in policy and oversight could indicate systemic property management problems.

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## Recommendations

We recommend that the NASA Administrator

- direct NASA property administrators, during their periodic property system analyses, (1) not to accept acquisition approvals from unauthorized NASA or contractor personnel and (2) to evaluate whether acquisitions of government equipment meet regulatory and contractual requirements and report instances of noncompliance to contracting officials;
- direct NASA property administrators to ensure compliance with regulations requiring contractors to develop minimum use criteria; maintain adequate utilization information on government equipment; justify equipment retention in appropriate circumstances; and report government equipment that is excess to known, current, or future needs as available for use by other contractors or government personnel;
- revise delegation instructions to DOD contract administration offices requesting that they do the above during property system surveillance of NASA contracts; and
- direct Headquarters property managers to develop more cost-effective approaches for screening and reusing excess items.

# Problems in Reporting on Government Equipment

NASA's financial reports on government property held by contractors contained numerous undetected errors and inconsistencies. NASA had limited assurance that these reports were accurate and complete because contractors sometimes failed to correct or report property information, and centers could not perform complete reconciliations between contractor reports and NASA's equipment management system data. Moreover, the contractors' reports were not adequately reviewed by government property administrators. Some of the problems were similar to those we reported in October 1992.<sup>8</sup>

## Contractors Report Inaccurate Information

To avoid duplicate record keeping, the FAR requires most contractors holding government property to maintain the government's official property records and certify the accuracy of all reports submitted on the value of government equipment they hold. NASA uses the annual contractor-prepared "Report of Government-Owned/Contractor-Held Property" (NASA Form 1018) to update its accounting records and report the value of various types of contractor-accountable government property.

The following examples illustrate the kinds of errors, inconsistencies, and other problems we identified in contractors' annual property reports. None of them had been identified by contractor personnel, NASA and DOD property administrators, or NASA financial personnel during their initial preparation, review, or use of the reports.

- A contractor amended its 1991 report due to errors noted a year later while preparing its 1992 report. The changes corrected a beginning balance understatement of \$3.5 million and an ending balance overstatement of \$1.8 million. Many of the errors were the result of inadequate oversight of NASA property held by subcontractors. For example, a subcontractor did not report more than \$2 million in government materials it held. Another subcontractor reported that it held \$1.8 million in space hardware, even though it had not been authorized to have any such equipment. The subcontractor had totaled other categories of government property and had erroneously reported the total as space hardware.
- A contractor held over \$10 million worth of general purpose computer and laboratory equipment in its avionics and health care laboratories. The contractor correctly reported the equipment in the health care laboratories

<sup>8</sup>Financial Management: NASA's Financial Reports Are Based on Unreliable Data (GAO/AFMD-93-3, Oct. 29, 1992).

as general purpose equipment but reported similar equipment in the avionics laboratory as space hardware.

- The same contractor procured equipment that was directly delivered to a NASA center. The contractor did not show the equipment as being acquired in its annual report but reported it as being disposed of when the items were shipped to the center. Thus, the report understated the contractor's ending balances of government equipment by \$238,000.
- A contractor identified hundreds of items on property records as contractor-acquired, when, in fact, they should have been listed as government-furnished. As a result of questions we raised, the contractor reviewed property records and changed the identification from contractor-acquired to government-furnished on more than 450 items with a total value of approximately \$850,000. The contractor also erroneously reported approximately \$98,000 worth of property as contractor-acquired in its annual report of government-held property that should have been reported as government-furnished.
- A contractor could not explain why the beginning balance reported for materials was \$2.2 million less than the supporting documentation. The contractor's property administrator attributed the difference to a math error.
- A contractor reported over \$13 million of NASA historical artifacts and public display exhibits as general purpose equipment. Although the items do not fit the definition of general purpose equipment, the property administrator permitted reporting the items as general purpose equipment because the report format does not provide for reporting such unusual assets.
- Two contractors misclassified general purpose equipment as special test equipment. For example, one contractor reclassified more than \$5 million worth of equipment held under two contracts from special test equipment to general purpose equipment. Reclassified items included a forklift, a personal computer, computer printers, manual typewriters, a slide projector, a facsimile machine, a soldering system, space heaters, air conditioners, a jeep, binoculars, filing cabinets, desks, chairs, floor scrubbers and polishers, a vacuum cleaner, refrigerators, step ladders, snow throwers, and toaster ovens. Neither property administrators nor contractor officials could provide documentation on why this equipment was ever classified as special test equipment.
- A contractor did not report property valued at about \$14 million because it did not know how it should be classified.

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## Government Review of Contractors' Reports Is Inadequate

NASA requires government property administrators to ensure that the contractors' property control systems provide for the reasonably accurate preparation, contractor validation, and timely submission of annual reports of government property. However, the procedures only require the administrators to certify on the contractor's report whether the contractor had an approved property control system and whether the data on the reports appeared reasonable. We found that weaknesses in NASA's and DOD's analyses of property control systems and reconciliations of records called into question the soundness and reasonableness of property reports.

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## Analyses of Property Control Systems Do Not Ensure Reliable Reporting

NASA relies on the property administrators' periodic property control system analyses, primarily performed by DOD agencies for NASA, for assurance that contractors' annual property reports are reliable. Property administrators are required to report the results of their system analyses to the NASA center that awarded the contract. In evaluating property control systems, property administrators are required to ensure that the contractor's property system provides for the accuracy and completeness of reported information. However, some of the property administrators' reviews were not in sufficient detail and scope to adequately ensure reporting accuracy. At one contractor where we found reporting errors, the property manager told us that the government's property administrators only briefly reviewed the detailed information supporting the property report and did not identify any errors.

Moreover, until 1993, the results of contractor property system analyses prepared by DOD agencies were frequently not reported to NASA. Thus, NASA did not know the adequacy of many of their contractors' property control systems. NASA officials said one reason why NASA had not received some of these reports is that DOD property administrators are no longer required to do their analyses on an annual basis, but they have not notified NASA in what year the analyses are planned. Therefore, NASA was reporting some property system analysis reports as not received when DOD had not scheduled them to be done that year.

In 1992, we reported that DOD agencies had not always provided the results of contractors' property system analyses to NASA. As a result of our report, NASA reported in 1992 that contractor-held property accounting and reporting was a material internal control weakness. NASA Headquarters has recently taken steps to improve the timeliness of DOD agencies' reporting of their property system analyses. For example, NASA officials met recently

with officials of the DOD agencies to discuss corrective actions to improve the timeliness of survey reports. As a result, DOD officials notified all property administrators to apprise NASA centers of the results of their system analyses of NASA contractors and their schedules for updating their analyses. NASA property managers said DOD has been very responsive and that they are now much better informed on the status of their contractors' compliance with property regulations. For example, Goddard officials, who have historically reported not receiving numerous property system analyses from DOD, recently told us they had received more than 90 percent of the current DOD property system analyses.

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### **Inconsistencies Between NASA and Contractor Records Hamper Reconciliations**

As an internal control measure, NASA property management procedures require contractors to compare their records annually with NASA's equipment management system records. However, the discrepancies and inconsistencies between the contractor and government records on some of the contracts we reviewed indicate that the required reconciliations were not being adequately performed. One contractor, for example, was unable to reconcile its differences with the government's records for over a year due to many inconsistencies.

Another contractor did not report more than \$100,000 of equipment to NASA's equipment management system; some of the equipment had been acquired by the contractor more than a year before. Contractor and NASA property personnel said that the contractor had not reconciled records annually as required. Our comparison of the official property records kept by the contractor with NASA's equipment system showed that 29 of the 100 items listed in the contractor's records were not in the NASA system. Of the 71 items in NASA's system, 34 were listed with incorrect tag numbers, serial numbers, or prices.

Additionally, after contractors have reconciled their records with information in NASA's equipment management system, centers compare property data maintained in NASA's system with contractors' annual reports of government-owned, contractor-held property. The centers are required to conduct these comparisons to detect possible nonreporting or gross underreporting by contractors. However, complete reconciliations cannot be performed because NASA's equipment management system and contractor reports have different reporting requirements. For example, the NASA equipment management system contains information on equipment with an acquisition cost of \$1,000 or more, while contractor annual property reports provide information on general purpose equipment



valued at over \$5,000 and on special test equipment and special tooling at any dollar value.

A contributing factor to the reporting difficulties is that in requiring its contractors to report the value of government property they hold, NASA uses criteria that is inconsistent among property categories. For example, contractors are required to report all special tooling and special test equipment items regardless of value, but to report only general purpose equipment items valued at more than \$5,000. Further, contractors are required to report government materials they hold only if the total value of these materials exceeds \$75,000 in value.

According to some contractor officials and a NASA property management official, the inconsistent reporting requirement is confusing to contractors, leads to reporting errors, and requires contractors to do more work than if they were required to report all government property they held regardless of value. As discussed in chapter 1, requiring contractors to report only general purpose equipment costing \$5,000 and more underreports the value of general purpose equipment by at least \$340 million, or by an estimated 15 percent of the current reported value of general purpose equipment.

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## Conclusions

NASA has limited assurance that its contractors' annual reports of agency property are reliable due to internal control weaknesses. Errors and other deficiencies in some of the property reports submitted by the 13 contractors we reviewed were due to inadequate reviews and reconciliations by contractor and government officials when reports are submitted and by property administrators during their property system analyses.

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## Recommendations

We recommend that the NASA Administrator

- require that during their periodic system analyses, NASA property administrators increase the detail and scope of their review of supporting data in order to improve the reliability and accuracy of contractors' property reports;
- revise the delegation instructions to DOD property administrators to request that they do the same during their analyses of NASA contractor-held property;

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**Chapter 4**  
**Problems in Reporting on Government**  
**Equipment**

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- provide contractors with detailed instructions on how unique items of government property should be categorized, valued, and reported; and
  - establish consistent materiality reporting criteria that meets both financial reporting and property administration needs.



# Examples of Equipment Improperly Provided to Off-Site Contractors

NASA frequently did not comply with FAR requirements for providing general purpose equipment to off-site contractors. The FAR prescribes that agencies should not provide general purpose equipment to contractors, except under certain conditions. None of these conditions applied to the following examples.

- An operations contractor purchased about \$14 million of general purpose equipment over a 3-year period, much of which equipped the contractor's leased premises. Items included computer and photography equipment, video recorders, televisions, portable radios, vacuum cleaners, and architectural drafting and plotting equipment. In all, the contractor held over \$21 million of government general purpose equipment at its premises. Contractor officials said they had always operated under an informal agreement that NASA would provide equipment because the contractor was performing services for NASA.
- A service contractor was provided over 8,000 items of general purpose equipment valued at almost \$12 million under two contracts. Items ranged from inexpensive items like waste baskets and lamps, to a \$200,000 computer.
- A logistics support contractor was provided more than 2,000 general purpose equipment items valued at more than \$3 million. These included standard office items such as electric pencil sharpeners, file cabinets, typewriters, and telephone equipment; and warehouse equipment such as a hand truck and a \$29,000 fork lift. A corporate official said the company is not opposed to providing some of its own general purpose equipment; it does so under contracts with other government agencies. He said that the company did not provide any of its own equipment under this contract because NASA had not asked the company to do so. Other contractor and center property officials also told us that other agencies do not provide general purpose equipment to contractors as frequently as NASA does.
- A medical research contractor acquired about \$5 million of general purpose equipment during the last 2 years. Government equipment completely outfitted the contractor's leased premises and included office furniture, refrigerators, telephones, personal computers, electric pencil sharpeners, typewriters, and answering machines. A contractor official said NASA had never asked the contractor to provide its own equipment.
- A support service contractor purchased about \$400,000 worth of general purpose equipment in 1992, including water coolers, file cabinets, office furniture, plastic floor mats, personal computers, a color copier and printer, and an aluminum hand truck. Contractor officials said NASA never asked them to provide their own equipment. The ability of this small business contractor to develop into a commercially viable enterprise could

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**Appendix I**  
**Examples of Equipment Improperly**  
**Provided to Off-Site Contractors**

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be affected because NASA owned virtually all of the equipment used to perform the contract.

- An engineering and development contractor provided about 2,000 items of government-owned computers and related equipment valued at over \$3 million to a software development subcontractor. A contractor official with DOD contract experience said DOD would have required the contractor to provide the general purpose equipment and that NASA should have done the same.
- A research and development contractor acquired (over a 1-year period) personal computers, cameras, video recorders, printers, bicycles, ladders, portable work carts, and hundreds of other general purpose items valued at over \$5 million to perform its NASA contract. The contracting officer acknowledged that no FAR exception permitted providing such equipment but that he allowed the contractor to purchase the items because providing such equipment helped the contractor meet its contract objectives.
- A subcontractor to a research and development contractor acquired 47 personal computers and related laser printers costing over \$230,000 as direct charges to the government without obtaining the contractor's approval. Subcontractor officials justified their acquisitions of equipment such as computers, data facsimile machines, copy machines, and other support equipment as being standard practice at NASA. At the time of our visit, the contractor was attempting to have its subcontractor reimburse the direct charges to the contract and pay the costs out of its own capital funds.

# Examples of Inadequate Oversight and Approval of Contractor Acquisitions

The following presents examples of inadequate contracting officer oversight and approval of contractor acquisitions of general purpose equipment. The FAR requires contracting officers to provide written approval before contractors acquire any item of such equipment, regardless of the dollar value.

- One contracting officer established a practice of not approving contractor acquisitions of any equipment item valued under \$100,000 if the contractor determined that the item was to (1) support work conducted on a NASA center; (2) aid contractor employees who are solely dedicated to the NASA contract; (3) replace, repair, or upgrade existing government equipment; or (4) support a special NASA project or requirement. Under this practice, the contractor acquired government equipment valued in the millions of dollars during 1992, including a \$32,000 laser plotter, a \$90,000 video projector, and \$22,500 worth of network system upgrades to personal computers located at the contractor's premises. Other items included a heavy duty electric stapler, camera equipment, a transparency maker, a welding machine, vacuum cleaners, portable radios, and a \$700 movable message sign.
- Another contracting officer did not seek to approve a research and development contractor's equipment acquisitions valued at less than \$25,000 based on the misinterpretation that the FAR exempted contractor purchases under that amount. Without obtaining the required approvals, the contractor acquired numerous items of equipment including computer disk drives, monitors, system upgrades, and storage cabinets.
- The contracting officer on a public affairs services contract did not require approval of purchases under \$25,000. Equipment purchased without contracting officer approval included a fire extinguisher, water coolers, and office equipment.
- The contracting officer on a medical support contract delegated approval responsibilities to the NASA technical monitor for all equipment purchases valued at less than \$25,000.
- A contractor acquired more than 500 items costing less than \$1,000 each without obtaining required advance contracting officer consent. The total value of the items was more than \$100,000. The contracting officer is currently approving all acquisitions of general purpose equipment, according to center officials.
- Another contracting officer had directed a contractor to proceed without requesting prior consent due to the voluminous amount of requests to be reviewed. However, the contractor expressed concerns because his company had not obtained prior written approval of equipment acquisitions. Responding to the contractor's concerns, the contracting

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**Appendix II  
Examples of Inadequate Oversight and  
Approval of Contractor Acquisitions**

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officer began to require written approval on future purchases and ratified items the contractor had already purchased with contract funds.

# Examples of Property System Control Weaknesses

All of the 13 contractors' approved property control systems contained one or more control weaknesses that varied in significance. The following presents examples of property system control weaknesses identified at selected contractors.

- A contractor's equipment receiving procedures were inadequate to ensure that all government equipment acquired was properly tagged and recorded. Contractor property managers identified seven items of government equipment valued at over \$55,000 that had not been properly recorded because receiving department personnel had not identified the items as government equipment upon delivery.
- Another contractor failed to tag and record a \$709,000 item for a similar reason. The contractor had the item for over a year when we identified it. At five other contractors, we found that one or more items were not properly tagged and controlled as government equipment, including a voice distribution system, a test console, office furniture, steel carts, a magnetic stirrer hot plate used in medical research, a refrigerator, and two personal computers.
- A contractor had not done the required annual inventory in nearly 3 years. The NASA property administrator did not question the noncompliance and continued to approve the contractor's property control system with no deficiencies. In 1992, the contractor reported to NASA that it could not locate 87 pieces of government equipment valued at about \$129,000, and it requested relief from liability. Because the contractor had an approved property system, the contracting officer granted the relief.
- A contractor conducted annual inventories, but did not reconcile the results with official property records or report items that could not be located to the DOD property administrator. Recently, when the contractor reconciled inventory results, 32 items, with a total value of over \$55,000, were reported missing. Missing equipment included one item worth more than \$7,000 and five computers with a total value of almost \$19,000. Fourteen of the items had been missing for 3 years or more, and a \$5,000 item had been missing for a decade. The contractor has requested relief from liability. Property management officials at the center that provided the equipment, however, noted that the amount of lost equipment indicated that the contractor was failing to comply with approved property control procedures, and they recommended that the contractor be held financially responsible for losses.
- Another contractor refused to inventory items valued at less than \$1,000 because of the additional cost involved, even though the NASA contract provided for cost reimbursement. Although the administrative contracting officer notified the contractor in June 1991 to revise its inventory practices



and procedures, the DOD property administrator continued to approve the contractor's property system. As of March 1993, the contractor had not conducted the complete inventory or revised its procedures.

- A contractor had leased office furniture since 1987 at a cost of about \$240,000 annually without preparing a lease-versus-purchase analysis. When we raised the issue, the contractor agreed to investigate exercising lease-to-purchase options.
- A contractor purchased replacements for items that were still in working condition. For example, in 1992 the contractor excessed a 1984 truck with about 46,000 miles to another contractor. During that same year, the contractor acquired a new truck costing more than \$13,000. This same contractor excessed government-owned office furniture, including credenzas, office tables, and bookcases to another contractor in August 1991, even though the items were still adequate and functional. NASA's contracting officer approved the purchase requests for new modular furniture.
- A contractor acquired over \$1.1 million of special test equipment without obtaining the required advanced approval from the contracting officer. The DOD property administrator did not question these acquisitions during two successive property system analyses. After we discussed the lack of appropriate approvals with the contracting officer, he reviewed the contract, determined that advance approval was required, and began to require such approval for future acquisitions.
- Limited staffing precluded a contractor's property manager from visiting subcontractors to review property systems and explain property requirements, even though this was required by property system guidelines. The subcontractors' property administrators lacked experience and training and improperly acquired government property, did not submit required documents, and improperly prepared their official property reports. DOD property administrators were not aware of these problems.
- Three contractors improperly authorized their employees to remove NASA equipment, including a computer worth almost \$6,000, from the contractors' premises for use at home or on travel. These contractors' written property control procedures did not address or provide for the removal of NASA-owned equipment from the business location. At one contractor, there were at least 41 instances in a single year of such inappropriate use of government property. According to a NASA procurement official, the use of government property away from a contractor's place of business raises control, accountability, and liability concerns. In response to the concerns we raised, a property management official at the center involved asked the center's procurement policy officials to prohibit this practice. The unauthorized removal of equipment

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**Appendix III  
Examples of Property System Control  
Weaknesses**

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by contractors is currently under investigation, according to center officials.

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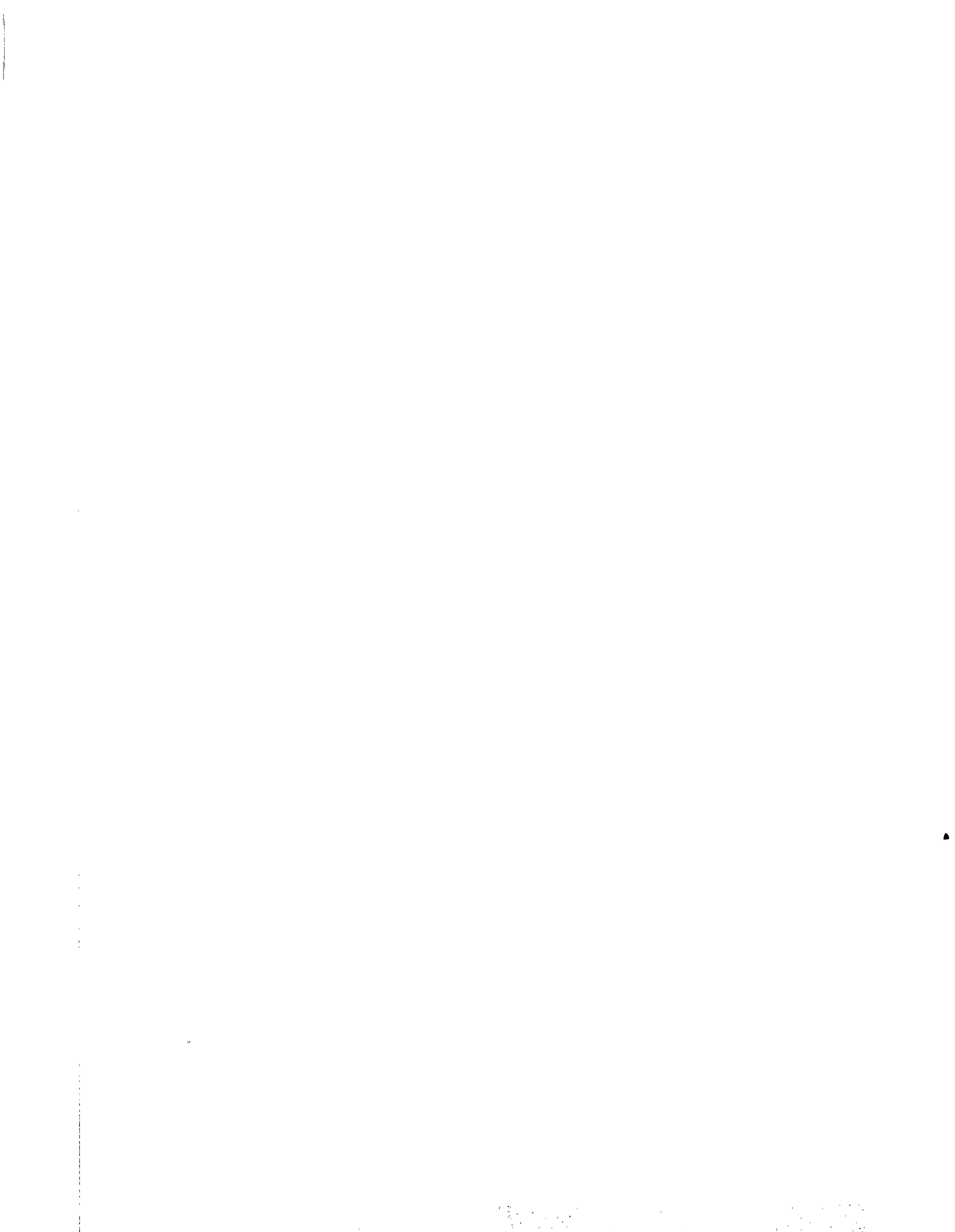
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